

IN THE CLAIMS:

The claims remain as follows:

1. (Previously Presented) A computer-implemented method of generating a graphical representation of data, comprising:

generating an abstract data structure defining a plurality of abstract attributes representing an abstract graphical representation of the data;

providing transformation rules for transforming the abstract data structure into a concrete data structure, the transformation rules comprising a plurality of subsets of transformation rules each subset describing graphical attributes of a requested graphical representation type and being specific to a different graphics rendering language, whereby the transformation rules support a plurality of graphical representation types and a plurality of graphics rendering languages;

selecting a subset of the plurality of subsets of transformation rules in accordance with a requested graphical representation type; and

generating, on the basis of the abstract data structure and the selected subset of transformation rules, a concrete data structure defining a concrete graphical representation of the data in a graphics rendering language; wherein generating the concrete data structure is done by operation of a computer processor.

2. (Previously Presented) The method of claim 1, wherein generating the abstract data structure comprises:

providing a plurality of abstract data structure templates, each abstract data structure template being associated with a specific graphical representation type;

determining the requested graphical representation type; and

selecting an abstract data structure template from the plurality of abstract data structure templates on the basis of the requested graphical representation type;

the abstract data structure being generated using the selected abstract data structure template.

3. (Original) The method of claim 2, wherein the requested graphical representation type is one of a bar chart, a line chart, a pie chart, a scatter plot and a combination thereof.
4. (Original) The method of claim 2, wherein the plurality of abstract data structure templates is associated with a particular data source of the data.
5. (Canceled)
6. (Canceled)
7. (Previously Presented) The method of claim 1, wherein the requested graphical representation type is one of a bar chart, a line chart, a pie chart, a scatter plot and a combination thereof.
8. (Original) The method of claim 1, wherein at least one of the abstract data structure and the concrete data structure is defined in Extensible Markup Language (XML).
9. (Original) The method of claim 1, wherein the concrete data structure is defined in a vector-based graphics language.
10. (Original) The method of claim 9, wherein the vector-based graphics language is one of Vector Markup Language (VML), Scalable Vector Graphics (SVG), and Hypertext Markup Language (HTML) Image Maps.
11. (Previously Presented) A computer-implemented method of generating a graphical representation of data, comprising:

receiving a selection of a requested graphical representation type for a selected data set;

selecting an abstract data structure template from a plurality of abstract data structure templates, each being specific to a different graphical representation type and defining a plurality of template attributes for generically representing an abstract graphical representation in the respective different graphical representation type, wherein the selected abstract data structure template is specific to the selected graphical representation type;

generating, on the basis of the requested graphical representation type and the selected abstract data structure template, an abstract data structure defining a plurality of abstract attributes abstractly representing the data set in the graphical representation;

providing transformation rules for transforming the abstract data structure into a concrete data structure, the transformation rules describing graphical attributes of the requested graphical representation type; and

generating, on the basis of the abstract data structure, a concrete data structure defining a concrete graphical representation in a graphics rendering language using the transformation rules; wherein generating the concrete data structure is done by operation of a computer processor.

12. (Original) The method of claim 11, further comprising:

rendering the data set, as described in the graphics rendering language, in a graphic.

13. (Original) The method of claim 11, wherein the graphical representation type is one of a bar chart, a line chart, a pie chart, a scatter plot and a combination thereof.

14. (Original) The method of claim 11, wherein the plurality of abstract data structure templates is associated with a particular data source of the data.

15. (Original) The method of claim 11, further comprising:

selecting a subset of the transformation rules in accordance with the graphical representation type; and

generating the concrete data structure using the subset of the transformation rules.

16. (Original) The method of claim 11, wherein at least one of the abstract data structure and the concrete data structure is defined in Extensible Markup Language (XML).

17. (Original) The method of claim 11, wherein the concrete data structure is defined in a vector-based graphics language.

18. (Original) The method of claim 17, wherein the vector-based graphics language is one of Vector Markup Language (VML), Scalable Vector Graphics (SVG), and Hypertext Markup Language (HTML) Image Maps.

19. (Previously Presented) A computer-implemented method of generating an abstract data structure for a graphical representation of data, comprising:

providing a plurality of abstract data structure templates, each abstract data structure template being associated with a specific graphical representation type;

determining a requested graphical representation type;

selecting an abstract data structure template from the plurality of abstract data structure templates on the basis of the requested graphical representation type;

generating an abstract data structure using the selected abstract data structure template; and

transforming the abstract data structure into a plurality of concrete data structures, each concrete data structure corresponding to a different graphics rendering language; wherein transforming the abstract data structure is done by operation of a computer processor.

20. (Previously Presented) A computer-implemented method of generating a graphical representation of data, comprising:

receiving a selection of a graphical representation type for a selected data set;

selecting an abstract data structure template from a plurality of abstract data structure templates, each being specific to a different graphical representation type and defining a plurality of template attributes for generically representing an abstract graphical representation in the respective different graphical representation type, wherein the selected abstract data structure template is specific to the selected graphical representation type;

generating, on the basis of the selected abstract data structure template, an abstract data structure defining a logical representation of the data set graphically represented according to the selected graphical representation type; and

transforming the abstract data structure into a plurality of concrete data structures, each concrete data structure corresponding to a different graphics rendering language; wherein transforming the abstract data structure is done by operation of a computer processor.

21. (Previously Presented) A computer-implemented method of generating a graphical representation of data, comprising:

receiving abstract attributes values comprising at least a selection of a requested graphical representation type for a selected data set;

selecting an abstract data structure template from a plurality of abstract data structure templates, each being specific to a different graphical representation type and defining a plurality of template attributes for generically representing an abstract graphical representation in the respective different graphical representation type, wherein the selected abstract data structure template is specific to the selected graphical representation type;

generating, on the basis of the received abstract attributes values and the selected abstract data structure template, an abstract data structure defining a plurality of abstract attributes abstractly representing the data set in the graphical representation;

selecting transformation rules for transforming the abstract data structure into a concrete data structure from a plurality of transformation rules, the transformation rules describing graphical attributes of the requested graphical representation type; and

generating, on the basis of the abstract data structure, a concrete data structure defining a concrete graphical representation in a graphics rendering language using the transformation rules.

22-47. (Canceled)